# Perkins Technical Skills Assessments (TSAs) and MSIP-5 Industry Recognized Credentials (IRCs)

This document is intended to provide further guidance to schools as they identify Technical Skills Attainment (TSA) assessments and Industry Recognized Credentials (IRC) that best meet the needs of their students. TSAs are required by Perkins IV for both secondary and post-secondary programs. IRCs, in this context, are intended for use with secondary students and for school districts interested in addressing MSIP-5, College and Career Readiness Standard 3, Indicator 4. In some instances an IRC is also identified, and could be reported as, a TSA.

**Concentrator:** A student who has earned three or more sequential credits in any state-approved CTE program grades 9-12. Sequential credits can consist of courses that crossover into different program areas. (Note: It is a local decision to determine the sequence; therefore, it is a local decision to determine when a student becomes a concentrator and completes a program).

Industry Recognized Credential (IRC): A portable, recognized credential that validates an individual has successfully demonstrated skill competencies in a core set of content and performance standards in a specific set of work-related tasks, single occupational area, or a cluster of related occupational areas.

**Technical Skill Attainment (TSA):** A technical skill assessment measures skill proficiency of Career and Technical Education (CTE) students who are concentrators (a student who has earned three or more sequential credits in any state-approved CTE program grades 9-12) and has completed an approved CTE program. A TSA is not intended to be taken after every course.

- Please refer to the MSIP-5 current <u>Comprehensive Guide to the Missouri School Improvement Program (2015)</u> for clarification on Performance Standard 3, Indicator 4 (College and Career Readiness).
- See Administrative Memo CCR-11-001 Regarding Important Testing Information
- MOSIS Code Sets

Beginning in FY2015 (the 2014-2015 school year), several assessments that had temporarily been on the MSIP IRC approved list were removed. Those assessments will remain on the approved Perkins TSA list.

Some new IRCs have been added to the MSIP-5 list to be effective beginning in FY2016 (the 2015-2016 school year) for reporting in June 2016. Additional IRCs have been identified to be added beginning in FY2016 (the 2016-2017 school year). IRC are identified a year prior to the reporting year in order to give schools ample time to prepare for the assessments. Please note clarification statements as some IRCs require both a knowledge and performance assessment.

School districts will have an opportunity to request that additional IRCs be added, removed, or clarification statements be revised on the MSIP-5 list during the spring IRC Application window.

Note: This guidance document will be updated periodically with web links or other information as needed.

### Agriculture, Food and Natural Resources

Assessment	Perkins TSA	Clarification/ Reporting Criteria TSA	MSIP IRC	Clarification/Reporting Criteria IRC (Effective FY2016)
MO Agriculture Skill & Knowledge Assessment MOASK Host Agreement Report MOASK 2015-16 Approved Sites Pathway to TSA & IRC Alignment	<b>✓</b>		1	
Agriculture Biotechnology - NOCTI	<b>/</b>			
Agricultural Mechanics - NOCTI	/			
Animal Systems - NOCTI	<b>/</b>			
Conservation NOCTI	<b>/</b>			
Floricultural NOCTI	/			
Floriculture-Greenhouse (NOCTI)	/			
Forest Products & Processing – NOCTI	<b>/</b>			
Horticulture - Landscaping NOCTI	<b>/</b>			
Natural Resource Systems NOCTI	<b>/</b>			
Production Agriculture – NOCTI	/			
Small Animal Science & Technology NOCTI	<b>✓</b>			
Veterinary Assistant – Animal Care Technologies	<b>/</b>		<b>/</b>	

#### **Architecture and Construction**

Assessment	Perkins TSA	Clarification/ Reporting Criteria TSA	MSIP5 IRC	Clarification/Reporting Criteria IRC (Effective FY2016)
Air Conditioning Certification – HVAC Excellence	<b>/</b>		1	

Architectural Drafting – SkillsUSA	/			
Autodesk Professional Certification (Certified Professional)	<b>/</b>		<b>✓</b>	
AutoCAD – Brainbench	<b>/</b>			
Building Construction Occupations – NOCTI	<b>/</b>			
Building Trades Maintenance – NOCTI	<b>/</b>			
Cabinetmaking –NOCTI	/			
Cabinetmaking – WoodLINKS USA	/			
CAD - NOCTI	/			
Carpentry NCCER	/		<b>/</b>	Carpentry Level One
Carpentry – NOCTI	/			
Carpentry – SkillsUSA	/			
Carpentry – PACT/Career Connections	/	Student must pass Career Connections Level 1 Exam.	<b>✓</b>	Student must pass Career Connections Level 2 Exam.
To schedule the exam, schools should contact: R. J. Catizon, Instructor rcatizon@cjtf.org 314-457-8300 Ext. 5663 636-284-5973 (cell)				
St Louis Carpenters Joint				
Apprenticeship Program				
8300 Valcour Avenue St Louis MO 63123				
Construction – Ramsay Corporation				
Construction Masonry - Blocklaying option – NOCTI	<b>✓</b>			
Construction Masonry - Bricklaying	/			

option – NOCTI			
Construction Masonry - Stone option – NOCTI	<b>✓</b>		
Technical Drafting – NOCTI	<b>✓</b>		
Drafting – SkillsUSA	<b>/</b>		
Housing – AAFCS	<b>✓</b>	<b>✓</b>	A student does not need to be a concentrator when used as an IRC.
HVAC – NOCTI	<b>/</b>		
HVAC/R - NOCTI	<b>/</b>		
HVAC/R – SkillsUSA	<b>/</b>		
Industrial Maintenance Mechanics- NOCTI	<b>✓</b>		
Masonry-NCCER	<b>/</b>	✓	This assessment is approved as an IRC beginning in FY2017.
Masonry – SkillsUSA	<b>/</b>		
Construction and HVAC NCCER	<b>✓</b>	<b>✓</b>	
Plumbing – NOCTI	<b>/</b>		
Plumbing – SkillsUSA	<b>/</b>		
Residential Wiring – SkillsUSA	<b>/</b>		
American Design Drafting Association- (ADDA)	<b>✓</b>	<b>✓</b>	

## Arts, A/V Technology and Communications

Assessment	Perkins TSA	Clarification/ Reporting Criteria TSA	MSIP5 IRC	Clarification/Reporting Criteria IRC (Effective FY2016)
3-D Visualization and Animation – SkillsUSA	<b>/</b>			
Advertising Design – SkillsUSA	<b>/</b>			

Audio-Radio Production – SkillsUSA	1			
Audio-Visual Communications – NOCTI	/			
Broadcasting and Journalism – NOCTI	/			
Fashion, Textiles and Apparel – AAFCS	/		1	A student does not need to be a concentrator when used as an IRC.
<u>Graphic Communications</u> – PrintED	1	The name/branding of this assessment changed in FY16 to SkillsUSA/PrintED. The content of the assessment did not change.	1	The name/branding of this assessment changed in FY16 to Graphic Communications (PrintED co-brand) The content of the assessment did not change. This assessment continues to be an IRC.
Graphic Production Technology – NOCTI	<b>/</b>			
Housing – AAFCS	/		1	
Performing Arts – NOCTI	/			
Photography – SkillsUSA	/			
Screen Printing Technology – SkillsUSA	<b>/</b>			
Television Production – NOCTI	/			
Television (Video) Production – SkillsUSA	<b>/</b>			
Visual Arts – NOCTI	/			
Visual Communication and Multimedia Design – NOCTI	1			

## **Business, Management and Administration**

Assessment	Perkins	Clarification/	MSIP5	Clarification/Reporting
	TSA	Reporting Criteria TSA	IRC	Criteria IRC (Effective FY2016)
Certification for Legal Professionals– ALS	<b>/</b>		1	

Entrepreneurship – MBA Research (cut score 65% 2011-2012 SY)	<b>/</b>		
Fundamental Business Concepts – ASK Institute (cut score 70% 2012- 2013 SY)	<b>/</b>	<b>✓</b>	
Missouri Business Management and Entrepreneurship – MBA Research (cut score 65% 2012-2013 SY)	<b>/</b>		
Missouri Business Management – MBA Research (cut score 65% 2012-2013 SY)	<b>/</b>		

## **Education and Training Services**

Assessment	Perkins TSA	Clarification/ Reporting Criteria TSA	MSIP5 IRC	Clarification/Reporting Criteria IRC (Effective FY2016)
Early Childhood Education – AAFCS	1		1	
Early Childhood Care and Education – NOCTI	<b>/</b>	NOCTI 3016, 4016 or 4017		
Education and Training – NOCTI	/			
Youth Development Credential	1		<b>/</b>	
Education Fundamentals – AAFCS	<b>/</b>	This TSA is appropriate for the Career Pathways to the Teaching Profession program.	1	This IRC is appropriate for the Career Pathways to the Teaching Profession program.

### Finance

Assessment	Perkins TSA	Clarification/ Reporting Criteria TSA	MSIP5 IRC	Clarification/Reporting Criteria IRC (Effective FY2016)
Accounting Basic – NOCTI	<b>/</b>			
Accounting Advanced – NOCTI – Post secondary Only	<b>/</b>			
ASK – (cut score 70% 2012-2013 SY)	<b>/</b>		<b>/</b>	
Finance - End of Program - MBA Research (cut score 65% 2012-2013	<b>/</b>			

SY)		
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#### **Health Science**

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Assessment	Perkins TSA	Clarification/ Reporting Criteria TSA	MSIP5 IRC	Clarification/Reporting Criteria IRC (Effective FY2016)	
1st Responder – National Registry of Emergency Medical Technicians (NREMT)	<b>/</b>	Appropriate for Perkins only			
Associate Degree Nursing (ADN) – MO Division of Professional Registration	<b>/</b>	Appropriate for Perkins reporting			
Certified Dental Assistant, Infection Control Exam (ICE) – Dental Assisting National Board, Inc.	<b>✓</b>		<b>✓</b>		
Certified Dental Assistant, Radiation Health & Safety Exam (RHS) – Dental Assisting National Board, Inc.	<b>✓</b>		<b>✓</b>		
Certified Nurse Aide (CNA) – Missouri Department of Health and Senior Services	<b>/</b>		<b>✓</b>		
Dental Assistant - MO - EFDA	<b>/</b>				
Dental Assisting – NOCTI	/				
Dental Assisting – SkillsUSA	/				
Dental Hygienists – MO Division of Professional Registration	<b>/</b>				
Dental Lab Technology – NOCTI	/				
EMT-Basic – Brainbench	<b>✓</b>				
EMT-Basic – NREMT	<b>/</b>		<b>/</b>		
Health Assisting – NOCTI	<b>/</b>				

Home Health Aide – NOCTI	/			
Lab/Pharmacy Tech (Secondary Only) – PassAssured	1			
Massage Therapists – MO Division of Professional Registration	<b>/</b>			
Medical Assisting – NOCTI	<b>/</b>			
Medical Assisting – SkillsUSA	<b>/</b>			
National Health Care Foundation Skill Standard Assessment – National Consortium on Health Science and Technology Ed.	<b>✓</b>			
Nursing Assisting – NOCTI	<b>/</b>			
Nurse Assisting – SkillsUSA	/			
Nutrition – AAFCS	<b>/</b>		<b>✓</b>	A student does not need to be a concentrator when used as an IRC.
Practical Nursing – MO Division of Professional Registration	<b>/</b>			
Practical Nursing – NOCTI	<b>/</b>			
Practical Nursing – SkillsUSA	/			
Pharmacy technicians – Institute for the Certification of Pharmacy Technicians	<b>/</b>			
Pharmacy technicians Pharmacy Technician Certification Board	<b>/</b>			
Radiology Technologists – American Registry of Radiologic Technologists	<b>/</b>			
Respiratory Therapist – National Board for Respiratory Care	<b>/</b>			
Surgical Technologists – National Board of Surgical Technology and Surgical Assisting	<b>✓</b>			

## **Hospitality and Tourism**

Assessment	Perkins Clarification/			Clarification/Reporting
Assessment	TSA	Reporting Criteria TSA	MSIP5 IRC	Criteria IRC (Effective FY2016)
ACF Certification Assessment – NOCTI		Comply with the requirements for an accredited American Culinary Federation program. For the Perkins TSA, student must be a concentrator that completes an approved CTE program.	<b>✓</b>	To earn the Certified Junior Culinarian (CJC) certification a student must complete the requirements for an accredited American Culinary Federation program, pass the NOCTI written and practical exam with a score of 70% or higher. A student does not need to be a concentrator when used as an IRC.
Hospitality and Tourism Management (HTMP) I & II American Hotel and Lodging Educational Institute (AHLEI)		For TSA: to be a concentrator a student could take two supporting CTE courses in a personal plan of study or pathway and then HTMP I or one supporting CTE course, HTMP I and HTMP II But not complete the mentored work requirement. In this case, the HTMP I or HTMP II assessments could be used as the TSA.	<b>✓</b>	To earn the AHLEI – internationally recognized - Certified Hospitality and Tourism Management Professional (CHTMP) a student must pass the American Hotel and Lodging Educational Institute's HTMP Year 1 final exam and HTMP Year 2 final exam and complete 100 hours of paid or unpaid work experience in one of four qualifying positions. You must have all three components to receive the IRC, and the assessments must be given at the end of each course.
Commercial Baking – SkillsUSA	<b>/</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.		
Commercial Foods – NOCTI	<b>✓</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.		

Culinary Arts – AAFCS	<b>√</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.	<b>✓</b>	A student does not need to be a concentrator when used as an IRC.
Culinary Arts – SkillsUSA	<b>√</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.		
Culinary Arts I: Prep Cook – NOCTI	<b>/</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.		
Culinary Arts II: Cook – NOCTI	<b>√</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.		
Hospitality Mgmt: Food & Beverage Option – NOCTI	<b>√</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.		
Hospitality Mgmt: Lodging Option – NOCTI	<b>√</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.		
ProStart I & II  National Restaurant Association  Education Foundation	<b>✓</b>	For TSA: to be a concentrator a student could take two supporting CTE courses in a personal plan of study or pathway and then ProStart I or one supporting CTE course, ProStart I and ProStart II BUT not complete the mentored work requirement. In this case, the ProStart I or ProStart II assessments could be used as the TSA.	<b>✓</b>	To earn the ProStart National Certification of Achievement (COA), a student must pass the National Restaurant Association's ProStart Year 1 and ProStart Year 2 final exams, and complete 400 hours of mentored work experience.
Restaurant, Food and Beverage Services – NOCTI	<b>√</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.		

Retail Commercial Baking – NOCTI	<b>/</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.	
Travel and Tourism - NOCTI	<b>/</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.	

#### **Human Services**

Assessment	Perkins	Clarification/	MSIP5	Clarification/Reporting
	TSA	Reporting Criteria TSA	IRC	Criteria IRC (Effective FY2016)
Apparel & Textile Production & Merchandising – NOCTI	<b>✓</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.		
Broad Field Family and Consumer Sciences – AAFCS	<b>/</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.		
Child Development Associate (CDA)	<b>✓</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.	<b>✓</b>	A student does not need to be a concentrator when used as an IRC.
Cosmetology – MO Division of Professional Registration	<b>/</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.	<b>✓</b>	A student does not need to be a concentrator when used as an IRC.
Cosmetology – SkillsUSA	<b>/</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.		
Cosmetology – NOCTI	<b>/</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.		
Early Childhood Care and Education— NOCTI	<b>/</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.		
Early Childhood Education – AAFCS	<b>/</b>	For the Perkins TSA, student must be a concentrator that completes an	1	A student does not need to be a concentrator to earn this IRC.

		approved CTE program.		
Family and Community Services – AAFCS	<b>/</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.	<b>✓</b>	A student does not need to be a concentrator to earn this IRC.
Fashion, Textiles, and Apparel – AAFCS	<b>/</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.	<b>✓</b>	A student does not need to be a concentrator to earn this IRC.
Food Science – AAFCS	<b>/</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.	<b>✓</b>	A student does not need to be a concentrator to earn this IRC.
Interior Decorating and Design – NOCTI	<b>/</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.		
Interior Design Fundamentals – AAFCS	<b>/</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.	<b>✓</b>	A student does not need to be a concentrator to earn this IRC.
Nail Care - State Cosmetology Board	<b>/</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.	<b>✓</b>	Nail Technician—Missouri State Board of Cosmetology and Barber Examiners—Manicure.
Nail Care – NOCTI	<b>/</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.		
Nail Care – SkillsUSA	<b>/</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.		
Nutrition – AAFCS	<b>✓</b>	For the Perkins TSA, student must be a concentrator that completes an approved CTE program.	1	A student does not need to be a concentrator to earn this IRC.

## Information Technology

Assessment	Perkins	Clarification/	MSIP5	Clarification/Reporting
	TSA	Reporting Criteria TSA	IRC	Criteria IRC (Effective FY2016)

Adobe Certified Associate (ACA)	1		1	
C + + Certified Associate Programmer	<b>✓</b>	This assessment is approved as a TSA beginning in FY2016.	<b>√</b>	This assessment is approved as an IRC beginning in FY2017.
Certified Internet Web Professional – CIW	<b>✓</b>		<b>✓</b>	Student must earn at least one certificate by passing requisite assessments for that certificate: Web Development Professional Certificate, Web Foundation Associate Certificate, Web Design Professional Certificate, or Web Security Associate Certificate
Cisco Certified Entry level Network Technician (CCENT)	/		1	
Cisco Certified Network Association (CCNA) Final Exam – Cisco Networking Academy	<b>/</b>			
Cicso Certified Networking Associate Security (CCNA Security)	/		1	
Cisco CCNA Discovery Final Exam – Cisco Networking Academy	/			
Cisco CCNA Exploration Final Exam – Cisco Networking Academy	/			
Cisco CCNP Final Exam – Cisco Networking Academy	<b>/</b>			
Cisco I.T. Essentials Final Exam – Cisco Networking Academy	1			
CompTIA A+ Certification	/		1	
CompTIA Network+	1		/	
CompTIA Security	/		/	
CompTIA Strata (this assessment includes CompTIA Strata Fundamentals through August 2015	<b>/</b>		<b>✓</b>	Assessment name change in 2015. Student must pass CompTIA Strata IT

and CompTIA Strata IT Fundamentals after August 2015)			Fundamentals after August 2015.
Computer Maintenance and Networking– TestOut	<b>/</b>		
Computer Maintenance Technology – SkillsUSA	<b>/</b>		
Computer Networking – NOCTI	<b>/</b>		
Computer Programming – NOCTI	<b>/</b>		
Computer Repair Technology – NOCTI	<b>/</b>		
Final Cut Certified Pro	<b>/</b>	<b>/</b>	
Internetworking – SkillsUSA	<b>/</b>		
Microsoft MTA	<b>/</b>	<b>✓</b>	Student must earn the IT Infrastructure, Database or Developer MTA certification
Microsoft Office Specialist	<b>/</b>	<b>✓</b>	Students must pass Word, Excel, PowerPoint and Access.
*Missouri IT Exam, Sequence 1 (50% Computer Applications; 50% Business Technology) – NOCTI	<b>/</b>		
*Missouri IT Exam, Sequence 2 (50% Computer Applications; 25% Desktop Publishing; 25% Multimedia)— NOCTI	<b>✓</b>		
*Missouri IT Exam, Sequence 3 (50% Computer Applications; 25% Desktop Publishing; 25% Web Design)— NOCTI	<b>✓</b>		
*Missouri IT Exam, Sequence 4 (25% Computer Applications; 25% Desktop Publishing; 25% Multimedia; 25% Web Design) – NOCTI	<b>✓</b>		
*Missouri IT Exam, Sequence 5 (50% Computer Applications; 25% Web Design; 25% Multimedia) –	<b>/</b>		

NOCTI			
Oracle Database SQL Fundamentals I	<b>✓</b>	<b>✓</b>	
Network Pro	<b>✓</b>		This assessment is approved as an IRC beginning FY17 as long as the school and teacher have signed proctoring agreements on file. Students must pass the TestOut Network Pro assessment to have earned an IRC.
Security Pro	<b>✓</b>		This assessment is approved as an IRC beginning FY17 as long as the school and teacher have signed proctoring agreements on file. Students must pass the TestOut Security Pro assessment to have earned an IRC.
TestOut PC Pro	<b>✓</b>		This assessment is approved as an IRC beginning FY17 as long as the school and teacher have signed proctoring agreements on file.  Students must pass the TestOut PC Pro assessment to have earned an IRC.

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#### Missouri IT Exams

- State Developed Assessment Blueprints & Pricing Information
- \*If administering the NOCTI pre and post test, pretest must be administered prior to November 30th. Please reference NOCTI's pretest policy

## Law, Public Safety, Corrections and Security

Assessment	Perkins TSA	Clarification/ Reporting Criteria TSA	MSIP5 IRC	Clarification/Reporting Criteria IRC (Effective FY2016)
Basic Firefighter – Mo Division of Fire Safety	<b>1</b> 5/1	Reporting Criteria 1571		
Crime Scene Investigation & Criminal Justice – SkillsUSA	1			
Criminal Justice – NOCTI	/			
Criminal Justice – Precision Exams	/			
Emergency and Fire Management Services – NOCTI (Added as a TSA 2.4.2015)	<b>/</b>			
EMT-Basic – Brainbench	/			
EMT-Basic – NREMT	1		1	
Firefighter I & II – MO Division of Fire Safety	<b>/</b>		<b>✓</b>	Students must pass both Firefighter I and II to have earned the IRC
Hazardous Materials Awareness and Operations (when bundled with Basic Firefighter) – Missouri Emergency Response Commission	<b>✓</b>			
Law Enforcement/Criminal Justice MOLESK	1	The written assessment is approved as a TSA for Perkins.	<b>✓</b>	Beginning in FY2017, a student must pass both the written assessment and the performance assessment to earn the IRC. Host testing sites must be approved and registered; all

	sites must adhere to all MOLESK testing protocols for assessments to
	be valid.

#### Manufacturing

Assessment	Perkins TSA	Clarification/ Reporting Criteria TSA	MSIP5 IRC	Clarification/Reporting Criteria IRC (Effective FY2016)
Automated Manufacturing Technology – SkillsUSA	<b>/</b>			
Cabinetmaking – SkillsUSA	<b>/</b>			
Certified Computer Service Technician – ETA	<b>/</b>		<b>/</b>	
Certified Production Technician (CPT)	<b>/</b>		<b>/</b>	
Cisco Certified Network Association (CCNA) Final Exam – Cisco Networking Academy	<b>/</b>			
Cisco CCNA Discovery Final Exam – Cisco Networking Academy	<b>/</b>			
Cisco CCNP Final Exam – Cisco Networking Academy	<b>/</b>			
Cisco I.T. Essentials Final Exam – Cisco Networking Academy	<b>/</b>			
Cisco CCNA Exploration Final Exam – Cisco Networking Academy	<b>/</b>			
CNC Milling and Turning Technology – SkillsUSA	<b>/</b>			
Computer Repair and Computer Networking – Cisco Networking Academy	<b>/</b>			
Electronics Technicians Association (ETA)	<b>/</b>		<b>✓</b>	

International Society of Certified Electronics Technicians (ISCET) Online Certification	<b>✓</b>	<b>✓</b>	
Electronics Applications & Technology – SkillsUSA	<b>/</b>		
Electronics Technology – NOCTI	/		
Industrial Electricity – NOCTI	/		
IT Essentials I final exam – CISCO	/		
Machine Tool Technology – NIMS	/	1	
Major Appliance Technology – SkillsUSA	<b>/</b>		
Manufacturing Technician Level 1 (MT1) Certification from the Manufacturing Skills Institute	<b>√</b>	<b>√</b>	This assessment is approved as an IRC beginning in FY17.
Manufacturing Technology – NOCTI	/		
Mechatronics – SkillsUSA	/		
Precision Machining – NOCTI	/		
Robotics Technology – CERT	<b>/</b>		
Robotics and Automation Technology – SkillsUSA	<b>/</b>		
Telecommunications Cabling – SkillsUSA	<b>✓</b>		
American Welding Society– AWS	<b>✓</b>	<b>✓</b>	Passing the NCCER Welding Exam or SkillsUSA Welding Exam or NOCTI Welding Exam or Precision Welding Exam PLUS pass at least one weld evaluated and approved by an AWS-certified teacher or inspector who is not their current teacher.

Welding <u>NCCER</u>	/		
Welding – NOCTI	/		
Welding <u>SENSE</u>	/		
Welding – SkillsUSA	1		

### Marketing

Assessment	Perkins TSA	Clarification/ Reporting Criteria TSA	MSIP5 IRC	Clarification/Reporting Criteria IRC (Effective FY2016)
ASK - (cut score 70% as of April 2016)	<b>/</b>		1	
Cooperative Education Employability Skills- NOCTI	<b>/</b>			
Marketing End of Program – MBA Research (cut score 65%)	<b>/</b>			
Workplace Readiness – NOCTI (Approved for CCE programs only)	<b>/</b>			

## Science, Technology, Engineering and Mathematics

Assessment	Perkins TSA	Clarification/ Reporting Criteria TSA	MSIP5	Clarification/Reporting Criteria IRC (Effective FY2016)
Marine Service Technology – SkillsUSA	<b>✓</b>			
Pre-Engineering/Engineering Technology – NOCTI	<b>✓</b>			
Project Lead The Way	~	Student must pass two of three PLTW biomedical or two of three engineering EOCs with a stanine score of six or above.		
Volvo Penta	<b>/</b>			
Mercury Marine	<b>✓</b>			

## Transportation, Distribution and Logistics

Assessment	Perkins TSA	Clarification/ Reporting Criteria TSA	MSIP5 IRC	Clarification/Reporting Criteria IRC (Effective FY2016)
Auto Collision Repair Technology— SkillsUSA/ <u>ASE</u>	1	A student must pass either B2 or B3. SkillsUSA is an administrator of this ASE assessment.		
Auto Collision Repair TechnologyNATEF	<b>✓</b>	A student must pass either B2 or B3. NATEF and ASE work together with NATEF covering curricular areas and ASE the credentialing.	<b>✓</b>	A student must pass either B2 or B3. NATEF and ASE work together with NATEF covering curricular areas and ASE the credentialing.
Auto Technology – Today's Class	/			
Automotive Refinishing – SkillsUSA	/			
Automotive Service Technology – SkillsUSA	<b>/</b>			
Automotive Technician Advanced – NOCTI	<b>/</b>			
Automotive Technician Core – NOCTI	<b>/</b>			
Automotive Technician Examination – ASE	<b>✓</b>	A student will complete the ASE assessment in Brakes, Steering and Suspension, Engine Performance, and Electrical. If the student's average score is higher than the average cut score in these four areas, the student will be marked as a pass <b>OR</b> the student must complete and pass the MLR exam.	<b>✓</b>	Student must pass all four core assessments: brakes, steering and suspension, engine performance, and electrical <b>OR</b> the student must pass MLR plus one of the following: brakes, steering and suspension, engine performance OR electrical
Automotive Technician Standard – NOCTI	<b>✓</b>			
Automotive Youth Education Systems Exit Examination – AYES	<b>/</b>			
Aviation Maintenance Technology	/			

(Secondary) – SkillsUSA				
Aviation Maintenance Technology (Post secondary) – SkillsUSA	<b>/</b>			
Collision Repair/Refinishing Technology(combination) – NOCTI	<b>/</b>			
Collision Repair – NOCTI	1			
Collision Repair - ICAR	<b>✓</b>		<b>✓</b>	Student must pass either NST ProLevel 1 or REF ProLevel 1 to earn the IRC.
Collision Repair Technology – SkillsUSA	<b>/</b>			
Diesel Engine Technology – NOCTI	/			
Medium/Heavy Truck (Diesel) - ASE	<b>✓</b>	A student will complete the ASE assessment in brakes, steering and suspension, engine performance, and electrical. When a student's average score is higher than the average cut score in these four areas, the student will be marked as a pass.	<b>✓</b>	Student must pass all four core assessments: brakes, steering and suspension, engine performance, and electrical
Diesel Engines & Electronic Systems – SkillsUSA	<b>/</b>			
Heavy Equipment Maintenance and Repair – NOCTI	<b>/</b>			
Motorcycle Service Technology – SkillsUSA	<b>/</b>			
Power Equipment Technology – SkillsUSA	<b>/</b>			
Small Engine Technology – NOCTI	1			

# **IRC SUMMARY**

The chart below indicates the dates each IRC has been active for MSIP purposes.

	MSIP IRC	MSIP IRC	MSIP IRC	IRCs	IRCs
	July 2012	July 2014	July 2014	July 2015	July 2016
Assessment	through	through	through	through	through
	June 2014	June 2015	June 2017	June 2018	June 2019
MO Agriculture Skill & Knowledge Assessment	✓	✓	✓	✓	✓
ACF Certification Assessment – NOCTI	✓	✓	✓	✓	<b>√</b>
Adobe Certified Specialist	✓	✓	✓	✓	✓
Air Conditioning Certification – HVAC Excellence	✓	✓	✓	<b>√</b>	<b>√</b>
American Culinary Federation - ACF	✓	✓	✓	<b>√</b>	<b>√</b>
American Design Drafting Association- (ADDA)	✓	✓	✓	<b>√</b>	<b>√</b>
American Hotel and Lodging Association (AH&LA)	✓	✓	✓	✓	✓
American Welding Society– AWS	✓	✓	<b>√</b>	✓	✓
ASK (Marketing)	✓	✓	✓	✓	<b>√</b>
ASK (Finance)	✓	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Autodesk Professional Certification (Certified Professional)				<b>√</b>	<b>√</b>
Automotive Technician CorePDF Document – NOCTI	✓				
Automotive Technician Examination – ASE	✓	✓	<b>√</b>	✓	<b>√</b>
C + + Certified Associate Programmer					✓
					Effective
					2016-17
					school year

Carpentry NCCER	<u> </u>	<b>✓</b>	<b>√</b>	<b>√</b>	✓
Carpentry – PACT	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>
Carpentry PDF Document – NOCTI	<b>√</b>				
Certification for Legal Professionals – ALS	✓	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>
Certified Computer Service Technician – ETA	✓	<b>✓</b>	✓	✓	✓
Certified Dental Assistant, Infection Control Exam (ICE) – Dental Assisting National Board, Inc.	✓	✓	✓	<b>√</b>	<b>√</b>
Certified Dental Assistant, Radiation Health & Safety Exam (RHS) – Dental Assisting National Board, Inc.	✓	<b>✓</b>	✓	<b>✓</b>	<b>√</b>
Certified Internet Web Professional – CIW	✓	✓	✓	✓	✓
Certified Nurse Aide (CNA) – Missouri Department of Health and Senior Services	✓	✓	<b>√</b>	<b>√</b>	<b>√</b>
Certified Production Technician (CPT)	✓	<b>√</b>	✓	✓	<b>✓</b>
Child Development Associate (CDA)	✓	<b>√</b>	✓	✓	✓
Cicso Certified Networking Associate Security (CCNA Security)	✓	✓	✓	<b>√</b>	<b>√</b>
Cisco CCNA Discovery Final Exam – Cisco Networking Academy	✓				
Cisco CCNA Exploration Final Exam – Cisco Networking Academy	✓				
Cisco CCNP Final Exam – Cisco Networking Academy	✓				
Cisco Certified Entry level Network Technician (CCENT)	✓	<b>✓</b>	✓	<b>√</b>	<b>√</b>
Cisco Certified Network Association (CCNA) Final Exam – Cisco Networking Academy	✓				
Cisco I.T. Essentials Final Exam – Cisco Networking Academy	✓				
Collision Repair – ICAR	✓	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>
Collision Repair PDF Document – NOCTI	✓				
CompTIA A+ Certification	✓	<b>√</b>	✓	✓	✓

CompTIA Network+	✓	✓	✓	✓	✓
CompTIA Security	✓	✓	✓	<b>√</b>	✓
CompTIA IT Fundamentals (Replaced the retired CompTIA Strata IT Fundamentals exam 8.30.2015)	✓	✓	✓	<b>√</b>	<b>√</b>
Construction and HVAC NCCER	✓	✓	✓	✓	✓
Cosmetology – MO Division of Professional Registration	✓	✓	✓	✓	✓
CosmetologyPDF Document – NOCTI	✓				
Criminal JusticePDF Document – NOCTI	✓				
Culinary Arts – AAFCS	✓	✓	✓	<b>√</b>	✓
Culinary Arts I: Prep CookPDF Document – NOCTI	✓				
Culinary Arts II: CookPDF Document – NOCTI	✓				
Diesel Engine TechnologyPDF Document – NOCTI	✓				
Early Childhood Care and EducationPDF Document – NOCTI	✓				
Early Childhood Education – AAFCS	✓	✓	✓	✓	<b>√</b>
Education Fundamentals – AAFCS	✓	✓	✓	<b>√</b>	✓
Electronics Technicians Association (ETA)	✓	✓	✓	<b>√</b>	✓
EMT-Basic – NREMT	✓	✓	✓	✓	✓
Family and Community Services – AAFCS	✓	✓	✓	✓	✓
Fashion, Textiles and Apparel – AAFCS	✓	✓	✓	✓	✓
Final Cut Certified Pro				✓	✓
Firefighter I — MO Division of Fire Safety	✓	✓			
Firefighter I & II – MO Division of Fire Safety			✓	✓	✓
Food Science – AAFCS	✓	✓	✓	✓	✓
Fundamental Business Concepts – ASK Institute	✓	✓	✓	✓	✓
Graphic Communications – SkillsUSA/PrintED SkillsUSA Graphic Design (name change 2016)	✓	✓	✓	<b>√</b>	<b>√</b>
Housing – AAFCS	✓	✓	✓	✓	✓
HVAC/RPDF Document – NOCTI	✓				

HVACPDF Document – NOCTI	✓				
Interior Design Fundamentals – AAFCS	✓	✓	✓	<b>√</b>	<b>✓</b>
International Society of Certified Electronics Technicians (ISCET) Online Certification	✓	✓	✓	<b>√</b>	✓
Law Enforcement/Criminal Justice –MOLESK					Effective 2016-17 school year
Machine Tool Technology – NIMS	✓	✓	✓	✓	✓
Manufacturing Technician Level 1 (MT1) Certification from the					✓
Manufacturing Skills Institute					Effective 2016-17 school year
Masonry-NCCER					Effective 2016-17 school year
Medium/Heavy Truck (Diesel) - ASE	✓	✓	✓	<b>✓</b>	<b>✓</b>
Mercury Marine	✓				
Microsoft MTA	✓	✓	✓	✓	✓
Microsoft Office Specialist				✓	✓
Nail Care – SkillsUSA					
Nail Care – State Cosmetology Board	✓	<b>✓</b>	✓	<b>✓</b>	<b>√</b>
National Automotive Technicians Education Foundation – NATEF	✓	✓	✓	<b>√</b>	✓
National Health Care Foundation Skill Standard Assessment – National Consortium on Health Science and Technology Ed.	✓				
Network Pro					✓ Effective 2016-17 school year
Nutrition – AAFCS	✓	✓	✓	✓	<b>√</b>

Oracle Database SQL Fundamentals I				✓	✓
Precision MachiningPDF Document – NOCTI	✓				
ProStart Program – National Restaurant Association Education Foundation	✓	✓	✓	<b>✓</b>	✓
<u>SecurityPro</u>					Effective 2016-17 school year
Technical Drafting PDF Document– NOCTI	✓				
TestOut PC Pro					✓ Effective 2016-17 school year
Veterinary Assistant – Animal Care Technologies	✓	✓	✓	✓	<b>√</b>
Volvo Penta	✓				
Welding PDF Document– NOCTI	✓				
Youth Development Credential	✓	<b>√</b>	✓		